SECTION C:1

NUCLEAR MATERIAL STABILIZATION

PROJECT MANAGERS

P. M. Knollmeyer, RL
Phone: (509) 376-7435

G. W. Jackson, FH
Phone: (509) 373-6622

SUMMARY

The Nuclear Material Stabilization mission consists of the Plutonium Finishing Plant (PFP), WBS 1.4.5, PBS TP05.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of April 30, 2000. All other information is as of May 15, 2000 unless otherwise stated.

As of May 14, 2000 a total of 255 cans of Plutonium oxides and sludges have been stabilized through thermal stabilization (31 items since last report). A total of 13 liters of Plutonium nitrate solution have been stabilized in the prototype vertical denitration calciner [no change since December 1999 due to focus on $Mg(OH)_2$ Precipitation Process installation activities].

As of May 16, 2000, there have been 167 days without a lost workday injury, attributed to following Integrated Safety Management System (ISMS) principles.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that two of five milestones (40 percent) were completed on or ahead of schedule and three (60 percent) are overdue. Milestone TRP-00-415, "Complete Project W-460 Facility Design" is late because the call for design comments and incorporation of comments took longer that anticipated.
The milestone has since been completed, May 15, 2000. Milestone TRP-00-500, "Install Two LANL Pyrolysis Units for Stabilization of Polycubes," is late due to a proposed change in process implementation. A letter was sent to RL indicating the milestone would not be met. Milestone TRP-00-504, "Restart Cementation," is overdue because of re-sequencing of the stabilization processing. Cementation of Sand, Slag, and Crucible (SS&C) material processing will be delayed until FY 2001. Further details can be found in the milestone exception report following the cost and schedule variance analysis.

ACCOMPLISHMENTS

Maintain Safe and Compliant PFP

- As of May 16, 2000, there have been 167 days without a lost workday injury.
- All Polychlorinated Biphenyl-laden oil was removed from the sintering press Analytical Laboratory Room 145 and lines were flushed.
- Three nondestructive assay probe insertions were conducted on Tank 241-Z-361 Riser B. This completes the measurements on Riser B.
- The Special Task Team continued with D-5 cell agitator shaft, gearbox and motor repairs. The motor has been removed and the gearbox unbolted (additional entries ongoing).

Maintain Safe & Secure SNM

- Supported transfers of material to/from Thermal Stabilization and performed Non Destructive Assay (NDA) of newly stabilized material without impact to performance schedule.
- Installation of the new calorimeters in room 637 continues.

- Enhanced surveillance (weighing/radiography) of 2736-Z metal inventory completed April 26, 2000.
- Completed recovery plan dealing with the seismic issues related to the material storage cage in room 638.

Oxides/Metals/Polycubes Stabilization

- Readiness to operate all five furnaces was achieved.
- Readiness to thermally stabilize metal items was achieved.
- A contract was let with Holmes and Narver to evaluate oxides processing, develop a flow sheet and perform cost benefit analysis for process improvements.
- The interim report on Data Quality Objectives for stabilized oxides sampling and analysis was completed. Initial analysis indicates that a Loss on Ignition (LOI) value of 0.44 wt% for the sample will give a 95% probability of not greater than 0.5 wt% in the product can.
- The Oxides Blend Plan was revised to allow processing of lower exposure materials with smaller item weights.

Solution Stabilization

- Completed accelerated delivery of the $Mg(OH)_2$ process gloveboxes and equipment.
- Initiated double construction shifts (2 10-hour shifts, 6 days/week) to accelerate progress.
- Glovebox 3 installed in Room 230-C, initiated installation of internal process equipment.
- Completed electrical modifications in room 227.
- Plan of Action for the Operations Readiness Review (ORR) being finalized prior to submittal to RL for approval.

Polycube Stabilization

- PNNL testing report was issued.
- Plutonium Process Support Lab (PPSL) full scale testing report issued.
- PPSL report on cold testing of process parameters issued as an internal document. Issuance as "HNF-" document underway.

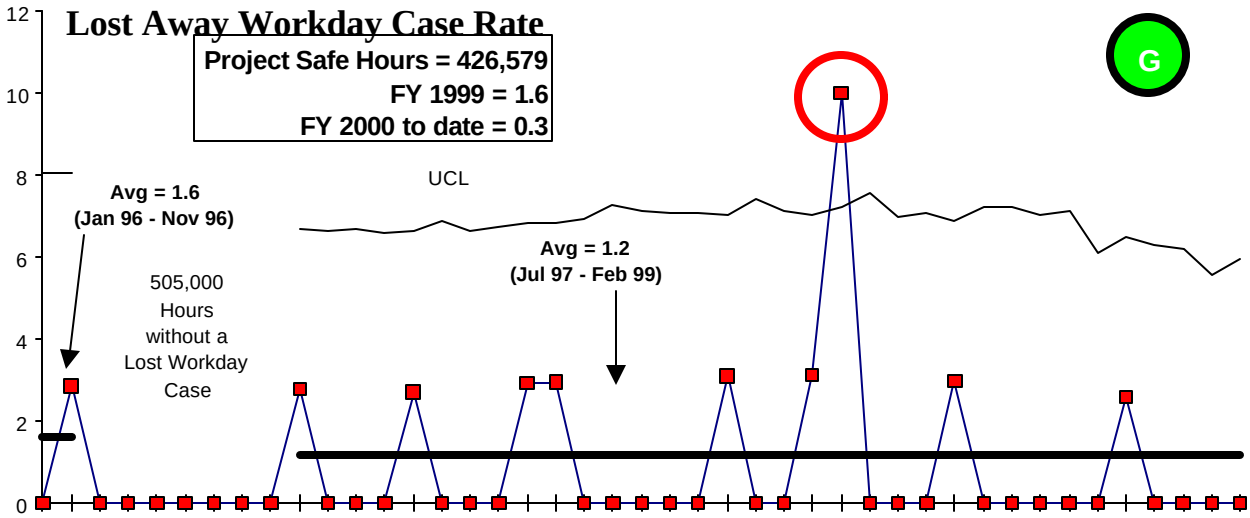
Project W-460

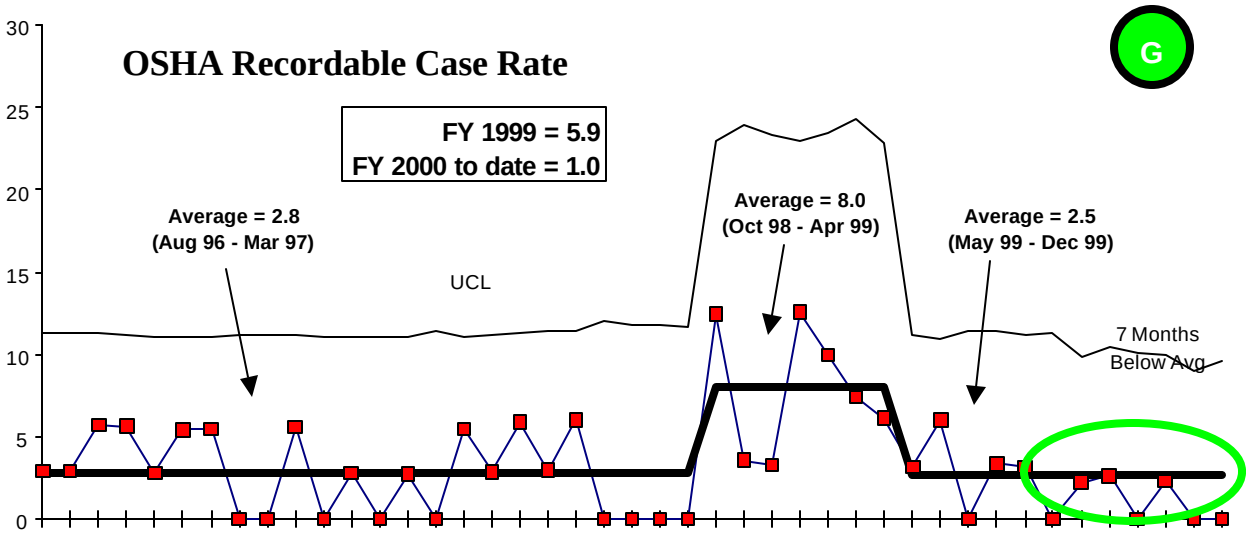
- 90% Review of Stabilization Packaging Equipment (SPE) & Facility Modification packages was completed.
- Savannah River Site (SRS) has finished assembly and started testing on Bagless Transfer System (BTS).
- Order for 2nd BTS has been placed and MOU approved.

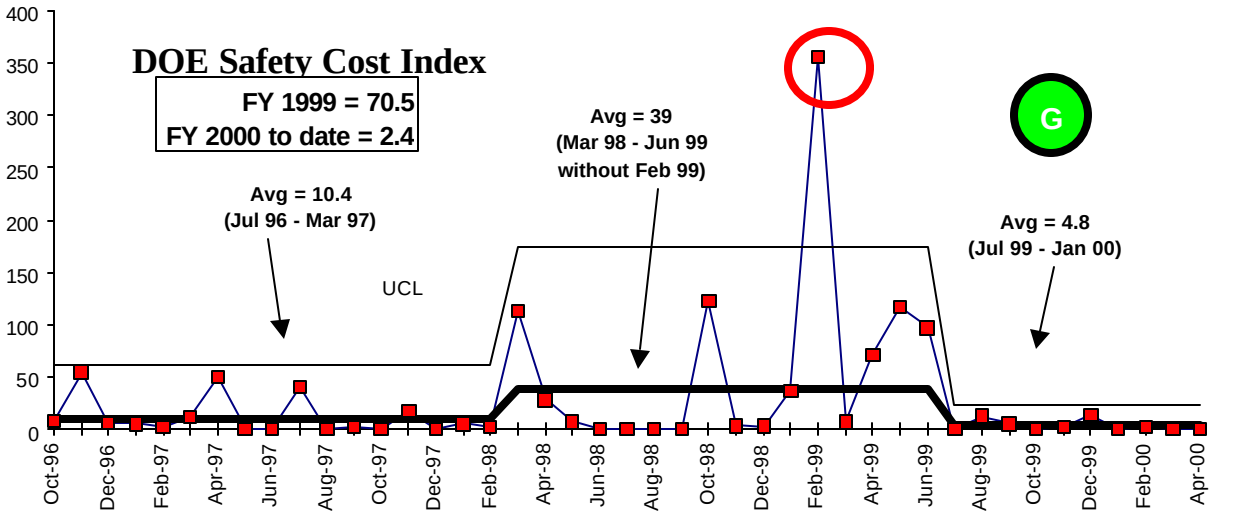
SAFETY

Safety performance continued to be excellent in April with no OSHA Recordable or Lost Workday Case injuries.

The DOE Safety Cost Index has both a new average and control limits reflecting the significant decrease noted earlier in the year. FY 2000 OSHA case rate and DOE Safety Cost Index are very favorable. OSHA recordable case rate has significantly improved in comparison to the adverse trend of Spring 1999. As of May 16, 2000 there have been 167 days without a lost workday injury.


Lost Away Workday Case Rate
Project Safe Hours = 426,579
FY 1999 = 1.6
FY 2000 to date = 0.3
G
UCL
Avg = 1.6
(Jan 96 - Nov 96)
Avg = 1.2
(Jul 97 - Feb 99)
505,000
Hours
without a
Lost Workday
Case
12
10
8
6
4
2
0


OSHA Recordable Case Rate
G
FY 1999 = 5.9
FY 2000 to date = 1.0
Average = 2.8
(Aug 96 - Mar 97)
Average = 8.0
(Oct 98 - Apr 99)
Average = 2.5
(May 99 - Dec 99)
UCL
7 Months
Below Avg
30
25
20
15
10
5
0

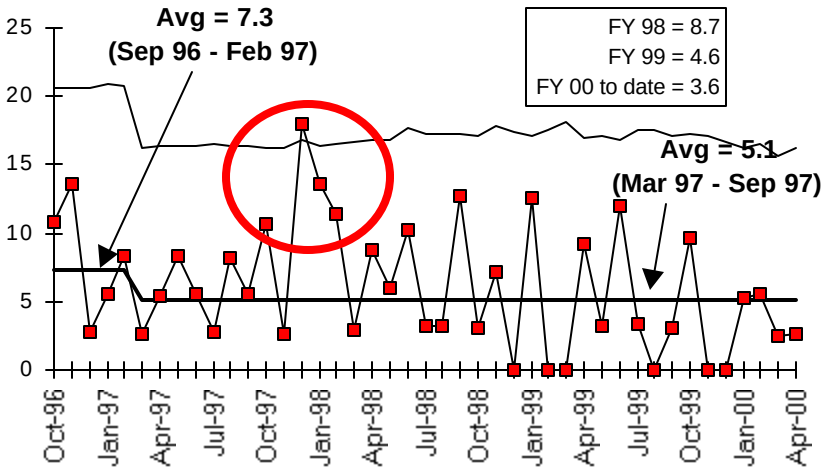

DOE Safety Cost Index
FY 1999 = 70.5
FY 2000 to date = 2.4
G
Avg = 10.4
(Jul 96 - Mar 97)
Avg = 39
(Mar 98 - Jun 99
without Feb 99)
Avg = 4.8
(Jul 99 - Jan 00)
UCL
400
350
300
250
200
150
100
50
0
Oct-96
Dec-96
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00

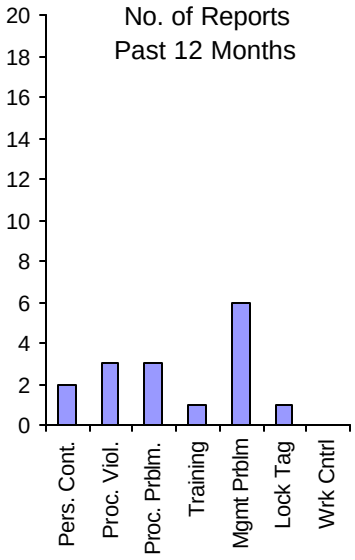
CONDUCT OF OPERATIONS / ISMS STATUS

CONDUCT OF OPERATIONS

Green

Events per 200,000 Hours





ISMS STATUS

Green

- All action items resulting from the Nuclear Material Stabilization Project Phase 1 verification assessment of the Integrated Safety Management System implementation have been completed.
- Phase II verification will be completed in conjunction with all Fluor projects during the 3rd quarter of the fiscal year.

BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Implementation of a WIPP "validated" plutonium measuring nondestructive assay (NDA) system in FY 2000 is being worked. If successful, implementation of this WIPP "validated" Pu NDA measurement for residues processing will significantly reduce shipment costs to WIPP (i.e., results in fewer drums by as much as 1000, which will reduce overall costs by approximately $2.4M [i.e., $2.4K per drum]).

- Currently, funding has been identified, and equipment is on order.

Opportunities for Improvement

- Installation of second BTS unit provides opportunity to accelerate packaging to DOE Standard 3013 criteria and significantly reduces overall radiation exposure to staff. The Standard requires that “oxides shall be stabilized by heating the material in an oxidizing atmosphere to a Material Temperature of at least 950°C … for not less than 2 hours.”

- Implement ALARA dose reduction measures:
  - Robotic (remote surveillance)
  - Room 638 cage shielding
  - Full scale mock-up vault cubicles
- Contracted with Westinghouse Savannah River Company to provide Outer Can Welder. This will allow review and approval by 3013 Design Authority and ensure final approvals will be expedited.
- A new Criticality Safety Evaluation Report (CSER) allowing an additional boat in HC-18BS is in final review at PFP. Plant approval is expected by the end of May.
- Recommendations for modification of Personnel Security Assurance Program (PSAP) two-man rule requirements, which would provide a potential reduction of resources for facility surveillance and maintenance activities, is scheduled to be presented to RL for review and comment on May 24, 2000.

UPCOMING ACTIVITIES

- Complete annual revision to Integrated Project Management Plan (IPMP) in May 2000.
- Deliver 2 Validated Data Packages on Tank 241-Z-361 core samples in May 2000.
- Thermally stabilize metals determined to be of higher risk as a result of ongoing surveillance activities (i.e.: radiography and weighing) in May 2000.
- Begin Pu solution stabilization via $Mg(OH)_2$ in the fourth quarter of FY 2000.
  - Complete glovebox installation in July 2000.
  - Complete ORR and training activities for stabilization activities in room 230-C in September 2000.
- Startup Residues operations in fourth quarter of FY 2000.
- Complete installation and startup of the 234-5Z BTS in fourth quarter of FY 2000.
- Begin metal stabilization processing in November 2000.
- Initiate polycube stabilization in 1st quarter of FY 2001.
- Complete Vulnerability Assessment that will be used to determine process location and storage location of Pipe-n-Go drums in May 2000.
- Complete RL Milestone FSP-00-415, “Complete Project W-460 Facility Design”, by incorporating comments to prepare design for release for construction by third quarter 2000.

COST PERFORMANCE (-$4.8M):

	BCWP	ACWP	VARIANCE
Nuclear Material Stabilization	$60.7	$65.5	-$4.8

The $4.8 million (8 percent) unfavorable cost variance is mostly driven by overruns in Solution Stabilization and in NMS Project Management (PBS RL-TP-12). Increased resources for the $Mg(OH)_2$ glovebox design, procurement and installation have been necessary to maintain the aggressive schedule demands. The NMS overrun is the result of the realignment of the TP-12 budget, and the variance will disappear when BCR #FSP-2000-029 is implemented. The cost overruns are somewhat offset by underruns in other areas due to a shortage of staff.

SCHEDULE PERFORMANCE (-$14.7M):

	BCWP	BCWS	VARIANCE
Nuclear Material Stabilization	$60.7	$75.3	-$14.7

The $14.7 million (19 percent) unfavorable schedule variance is due to the behind status on Project W-460, the Plutonium Stabilization and Packaging System, capital activities, such as the elimination of trailers and vault modification design. Facility construction modifications have not started as scheduled due to deviations in the definitive design, required changes to the NEPA Supplemental Analysis and approval of the Notice of Construction by the Washington State Department of Health. The negative schedule variance is also due to the behind schedule status on residues and solution stabilization activities. Solution stabilization construction activities are two months behind schedule, with startup now planned for September 2000. Restart activities for residues are behind schedule and the need for additional NDA equipment necessary for WIPP validation has been ordered. Restart of residues disposition activities (i.e., Pipe-n-Go of ash) is now anticipated in the 4th quarter of FY 2000, versus the planned April 2000 restart. Oxide stabilization activities continue significantly ahead of schedule.

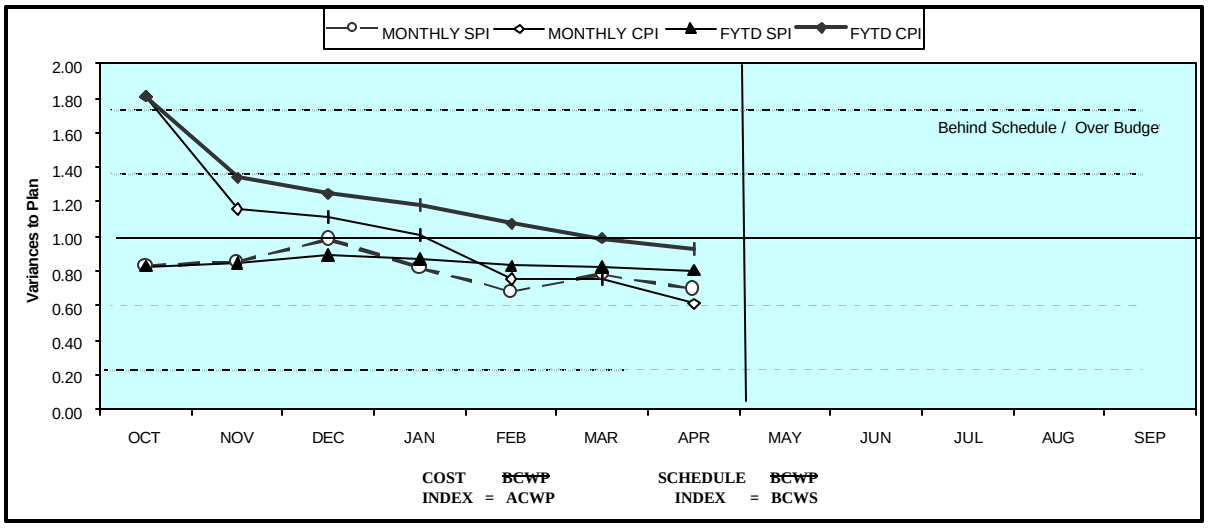
FY 2000 COST/SCHEDULE PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS – ($000)

Yellow

		FYTD									
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	FYSF	EAC
WBS 1.4.5 PBS TP05	PFP Deactivation	$ 75,338	$ 60,654	$ 65,465	$ (14,684)	-19%	$ (4,811)	-8%	$ 127,203	$ 127,634	$ 127,037
	Total	$ 75,338	$ 60,654	$ 65,465	$ (14,684)	-19%	$ (4,811)	-8%	$ 127,203	$ 127,634	$ 127,037

RL-Directed costs (steam) are included in the PEM BCWS.

COST/SCHEDULE PERFORMANCE INDICES (APRIL 2000 AND FYTD)



FY 2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.83	0.85	0.98	0.82	0.68	0.78	0.70					
MONTHLY CPI	1.81	1.16	1.11	1.01	0.75	0.75	0.61					
FYTD SPI	0.83	0.84	0.89	0.87	0.83	0.82	0.81					
FYTD CPI	1.81	1.34	1.25	1.18	1.07	0.99	0.93					
MONTHLY BCWS	$7,913	$12,725	$9,999	$10,540	$11,128	$ 13,401	$ 9,632	$ 12,535	$ 8,950	$ 9,309	$ 11,289	$ 9,782
MONTHLY BCWP	$6,543	$10,873	$9,849	$8,638	$7,568	$ 10,480	$ 6,704					
MONTHLY ACWP	$3,613	$9,386	$8,845	$8,587	$10,085	$ 13,961	$ 10,988					
FYTD BCWS	$7,913	$20,638	$30,637	$41,177	$52,305	$ 65,706	$ 75,338	$ 87,872	$ 96,822	$ 106,132	$ 117,421	$ 127,203
FYTD BCWP	$6,543	$17,416	$27,265	$35,903	$43,470	$ 53,950	$ 60,654					
FYTD ACWP	$3,613	$12,999	$21,844	$30,431	$40,516	$ 54,477	$ 65,465					

COST VARIANCE ANALYSIS: (-$4.8M)

WBS/PBS **Title**

1.4.5.1.13/TP05 **Stabilization of Nuclear Materials (-$3.9M)**

Description and Cause: The unfavorable cost variance is due primarily increased plant support needed for procurement and installation of the $Mg(OH)_2$ glovebox and equipment, and other construction activities, and use of subcontract staff augmentation.

Impact: Construction not started on time; cost overruns can hurt overall plant project funding.

Corrective Action: Acceleration of schedule for procurement, construction and startup has been implemented.

1.4.5.1.14/TP05 **Disposition of Nuclear Materials (+$1.1M)**

Description and Cause: Positive cost variance is the result of the ability to disposition waste and product materials at significantly reduced costs. There is a partially offsetting negative cost variance associated with Project W-460 because of delays in starting construction.

Impact: Project W-460 could cost more than originally estimated.

Corrective Action: Maintain aggressive hiring, training, and clearance program for Nuclear Operators and other support, which is now being implemented as planned.

1.4.5.1.15/TP05 **Transition PFP (-$0.6M)**

Description and Cause: The unfavorable cost variance is the result of increased costs for lab analysis

of tank 241-Z-361 samples as well as carryover work scope not yet reflected in the baseline. Laboratory Analysis has shown tank values exceed 50 ppm of Polychlorinated Biphenyl PCBs. Evaluation as to disposition is underway.
Impact: If work scope were stopped due to budget issues, the Tri-Party Agreement milestone due May 31, 2000 would not be met. Continuing work scope will result in cost over run for this activity, savings from elsewhere within NMSP will be required to offset the overrun.
Corrective Action: Approve and implement baseline change request to reflect FY 1999 carryover work scope. If PCBs are found to exceed allowable limits, a separate change request may be required to incorporate the additional special waste handling requirements into the baseline. Identify cost savings from elsewhere within the NMSP to offset this overrun.

1.4.5.1.12/TP05 PFP Fee Allocation (-$2.5M)

Description and Cause: Unfavorable cost variance due to point adjustment (-$1,769K) in October to adjust for delay in staff hiring ramp-up at the beginning of FY 2000. Also an increase in the fee accrual from a rate of 90% to 100%.
Impact: No impact.

Corrective Action: None required.

1.4.6.5/TP12 NMS Project Management/Mentoring (-$1.9M)
Description and Cause: The change request to realign the TP12 (Transition Project Management) budget between the Nuclear Material Stabilization Project and the River Corridor Project is still in process; therefore the NMSP budget is understated resulting in a negative cost variance.

Impact: None
Corrective Action: DOE-RL approval. Implementation of change request reflecting the PHMC restructuring.

SCHEDULE VARIANCE ANALYSIS: (-$14.7M)

WBS/PBS Title

1.4.5.1.14/TP05 Disposition of Nuclear Material (-$9.3M)
Description and Cause: The unfavorable schedule variance is primarily due to delays in Line Item Project W-460, Plutonium Stabilization and Packaging System, definitive design and construction. Facility construction modifications have not yet started as scheduled, due to deviations to the Definitive Design, required changes to the NEPA Supplement Analysis and approval of the Notice of Construction (NOC) by the Washington State Department of Health (WSDOH).
Impact: Potential delay in the startup of the Bagless Transfer and Stabilization system in 2736-ZB, which can impact stabilization activities in FY 2001.
Corrective Action: To assist in the recovery, a second BTS unit is being installed in the 234-5Z facility, which will enable BTS unit operation in FY 2000 as originally planned. Project W-460 management and WSDOH staffs are aggressively working to approve the NOC, which will enable construction to begin. The aggressive hiring, training and clearance program for Nuclear Operators and other support staff is being implemented as planned.

1.4.5.1.13/TP05 Stabilize SNM (-$4.8M)

Description and Cause: The unfavorable schedule variance is due primarily to the behind schedule status on residues and solution stabilization activities. Solution stabilization construction activities are two months behind schedule, with startup now planned for September 2000. Also, restart activities for cementation are behind schedule due to the need for additional Nondestructive Assay (NDA) equipment necessary for WIPP validation. Restart of cementation of Sand, Slag, and Crucible (SS&C) material processing is now anticipated in late July 2000, versus the April 2000 restart. Oxide stabilization activities continue significantly ahead of schedule.

Impact: Potential delay in both restart of cementation and startup of $Mg(OH)_2$ precipitation processing for solution stabilization; anticipate schedule recovery by the end of FY2000.

Corrective Action: An aggressive recovery plan has been developed for both solution stabilization and cementation activities to commence operations in September and July respectively. Plans are also in place to stabilize solutions and residues exceeding baseline commitments even with a late processing start. NDA equipment has been ordered and NMSP is working with the WM Project to meet the WIPP certification.

ISSUES

Technical Issues

Lack of certified shipping containers in the DOE Complex to meet PFP schedules.

Impact(s): Prohibits shipment of nuclear materials that cannot go to either WIPP or DOT-6M containers (i.e., Pu standards for re-certification, shipment of reactive materials for processing elsewhere, etc.).

Corrective Action: Work with the DOE Complex to certify containers to meet PFP shipping needs (i.e., 9975 container to be re-certified in June 2000, etc.).

Jointly resolve issues associated with precipitation process. Concentration, Density, Filtrate Handling (permitting of 241-Z to handle heavy metals), discard directly to tank farms.

Impact(s): Concentration/density issue may significantly impact the number of containers to be stored under final disposition. The 241-Z permitting issue, if not resolved, can impact the plant's ability to discard solution waste to tank farms resulting from the $Mg(OH)_2$ precipitation processing of plutonium solutions.

Corrective Action: Concentration/density issue is being worked through laboratory testing at both PNNL and PFP's Plutonium Process Support Laboratories. Appropriate actions will be taken according to laboratory results. Also, project management has worked with the Tank D-5/D-8 readiness team to ensure that these tanks are ready to support solution stabilization processing startup as scheduled.

Equipment for processing Pu inside the $Mg(OH)_2$ gloveboxes needs to be defined and approved by Operations before glovebox size can be finalized.

Impact(s): Gloveboxes cannot be ordered until size is finalized.

Corrective Action: Use mockup and daily meetings with Operations to finalize the internal arrangement of the gloveboxes to the point where a size can be determined and the gloveboxes ordered.

Solution Stabilization Readiness Assessment has been replaced with an ORR.

Impact(s): Impact to schedule. Delay of activities could impact Performance Incentive.
Corrective Action: Detailed evaluation conducted to identify activities and resources to perform scope of work. Finalizing list of activities for incorporation into project schedule.

Criticality analysis for storage of drums with Pipe Overpack Containers (POCs) at the Central Waste Complex (CWC). (Currently unfunded)

Impact(s): Drums with POCs will not be shipped to the CWC. The Cementation process will begin using a 90-day storage pad until permitted storage is approved by Ecology.
Corrective Action: A statement of work has been written by the Central Waste Complex safety representative for development of a criticality credibility analysis using an analysis similar to that used at RFETS to support POC drum storage at the CWC.

DOE/Regulator/External Issues

- RCRA Permitting Part A revision for adding ignitability waste code was submitted to Ecology in support of Cementation startup.
- RCRA Permitting in support of Pipe-N-Go:
  - A revised Notice of Intent (NOI) to define storage locations at PFP was released for public review
  - Revised Part A to provide permitted storage at PFP will be transmitted to Ecology in May 2000
- Notice of Construction (NOC) was sent to Washington State Department of Health (WSDOH) on March 6, 2000, could take up to 60 days for approval. No feedback received to-date.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY00 COST IMPACT $000	SCH	TECH	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
FSP-2000-001	13-Oct-99	Delete TRP-99-419, Complete Install. of Production Scale Vertical Calciner	$0						Deleted
FSP-2000-004	23-Nov-99	PFP Test Polycube Stabilization via Muffle Furnace	$0	X	X	17-Feb-00	17-Feb-00		RL approved
FSP-2000-005	30-Nov-99	Implement PFP Int Proj Mgmt Plan Addendum I	$659	X	X				In work at PFP
FSP-2000-011	27-Dec-99	Adjusted PFP Cementation Processing to include Sand, Slag and Crucible	$0	X	X	14-Jan-00	18-Jan-00	17-Feb-00	Implemented
FSP-2000-025	10-Mar-00	PFP Replacement Transformer	$992	X		27-Mar-00	27-Mar-00	Not Req'd	Implemented
FSP-2000-029	26-Jan-00	PFP FY2000 Funds Reduction	($6,885)	X		9-Mar-00	23-Mar-00	16-May-00	RL approved
FSP-2000-032	22-Mar-00	PFP 2nd Bagless Transfer System	$2,127	X	X	29-Mar-00	7-Apr-00		Submitted to RL 4/7/2000
FSP-2000-035	3-Apr-00	PFP Carry-over Workscope	$620	X	X				In work at PFP
ADVANCE WORK AUTHORIZATIONS									
AWA-00-001	21-Oct-99	Polycube Stabilization Testing	$500	X	X			21-Oct-99	Completed
AWA-00-002	22-Sep-99	Residue Cementation	$500	X	X			19-Oct-99	Completed
AWA-00-003	01-Jan-00	Main Power Transformers	$350	X				31-Jan-00	Completed
AWA-00-004	01-Jan-00	2nd Bagless Transfer Unit	$500	X	X			11-Feb-00	Completed
AWA-00-005	6-Mar-00	2nd Bagless Transfer Unit	$500	X	X			8-Mar-00	Completed

MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2000
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	1	0	0	0	0	1	0	2
DOE-HQ	0	0	0	1	0	0	0	1
RL	1	0	0	2	0	8	0	11
Total Project	2	0	0	3	0	9	0	14

Tri-Party Agreement / EA Milestones	
Tri-Party Agreement Milestone M-15-37A (TRP-00-501), **"Deliver Two (2) Tank Z-241-Z-361 Core Samples to 222-S"**, due 10/30/99 • Completed 1 month early (9/28/99)	Green
Tri-Party Agreement Milestone (TRP-00-511), **"Deliver Two (2) Tank 241-Z-361 Core Sample Validated Data Packages to EPA"**, due 5/31/00 • On Schedule	Green
DNFSB Commitments	
DNFSB Milestone IP-113 (TRP-00-500), **"Install 2 LANL Pyrolysis Units for Stabilization of Polycubes at PFP"**, due 12/31/99 • A BCR to remove pyrolysis stabilization of polycubes and implement thermal stabilization in its stead has been approved by RL and implemented into the baseline.	

MILESTONE EXCEPTION REPORT

Number/WBS	Level	Milestone Title	Baseline Date	Forecast Date

OVERDUE – 3

TRP-00-415 **HQ** Complete Project W-460 Facility Design 02/29/00 05/15/00
1.4.5
Cause: Issuing for review took longer than scheduled and then received more comments back than anticipated, thus comment incorporation taking longer than planned.
Corrective Action: None. This milestone was completed May 15, 2000.

TRP-00-504 **RL** Restart Cementation Operations 04/21/00 FY 2001
1.4.5
Cause: Stabilization processing has been re-sequenced.
Corrective Action: None, as the global stabilization end point will remain the same.

TRP-00-500 **HQ** Install Two LANL Pyrolysis Units for 12/31/99 Proposed
1.4.5 Stabilization of Polycubes Deletion
Cause: See DNFSB Commitment above.
Corrective Action: A BCR to remove pyrolysis stabilization of polycubes and implement thermal stabilization in its stead has been approved by RL and implemented into the baseline. However, this is a HQ milestone and cannot be removed from the list.

FY 1999 OVERDUE – 2

TRP-99-419 1.4.5	**RL**	Complete Installation of Production Scale Vertical Calciner	09/30/99	Proposed Deletion

Cause: The production scale vertical calciner has been replaced with the Magnesium Hydroxide Precipitation process.
Impact: No impact. This milestone is obsolete.
Corrective Action: Since installation and testing of the production scale vertical calciner is an EM-65 Management Commitment, the Department of Energy, Richland Office (DOE-RL) change control process cannot remove this milestone.

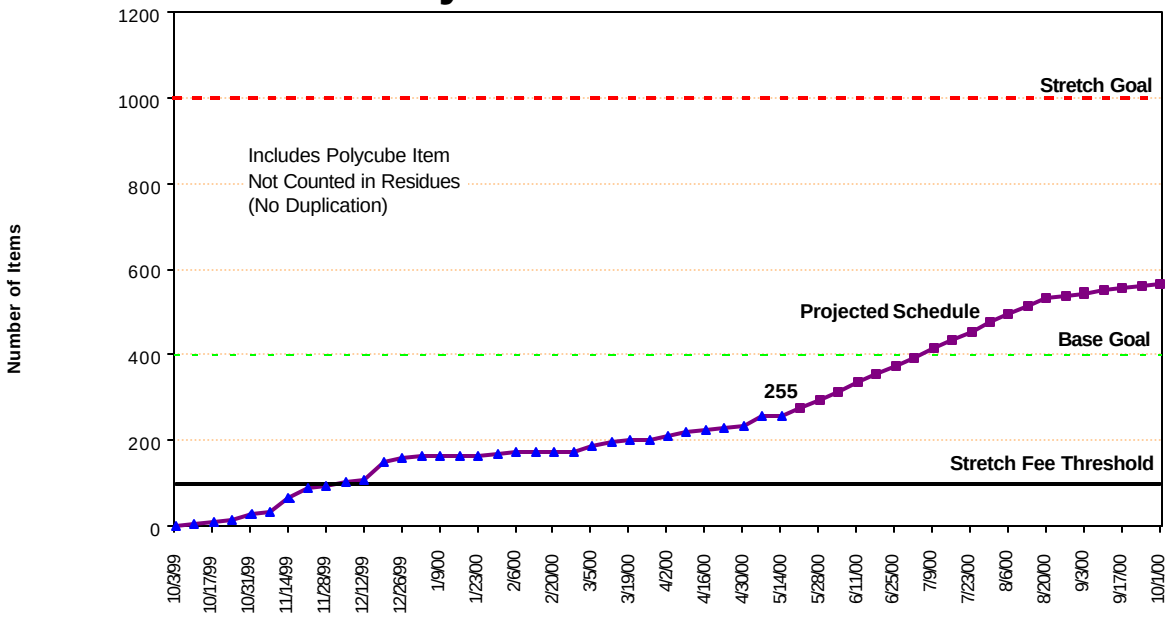
TRP-99-500 1.4.5	**HQ**	Complete Installation & Testing of Production Vertical Calciner	09/30/99	Proposed Deletion

Cause: The production scale vertical calciner has been replaced with the Magnesium Hydroxide Precipitation process.
Impact: No impact. This milestone is obsolete.
Corrective Action: Since this milestone is a DOE-HQ milestone and is part of the DOE-HQ 1998 DNFSB Recommendation 94-1 Implementation Plan, the Department of Energy, Richland Office change control process cannot remove this milestone. However, this milestone will be removed upon approval of the revised DOE-HQ DNFSB Recommendation 94-1 Implementation Plan.

PERFORMANCE OBJECTIVES

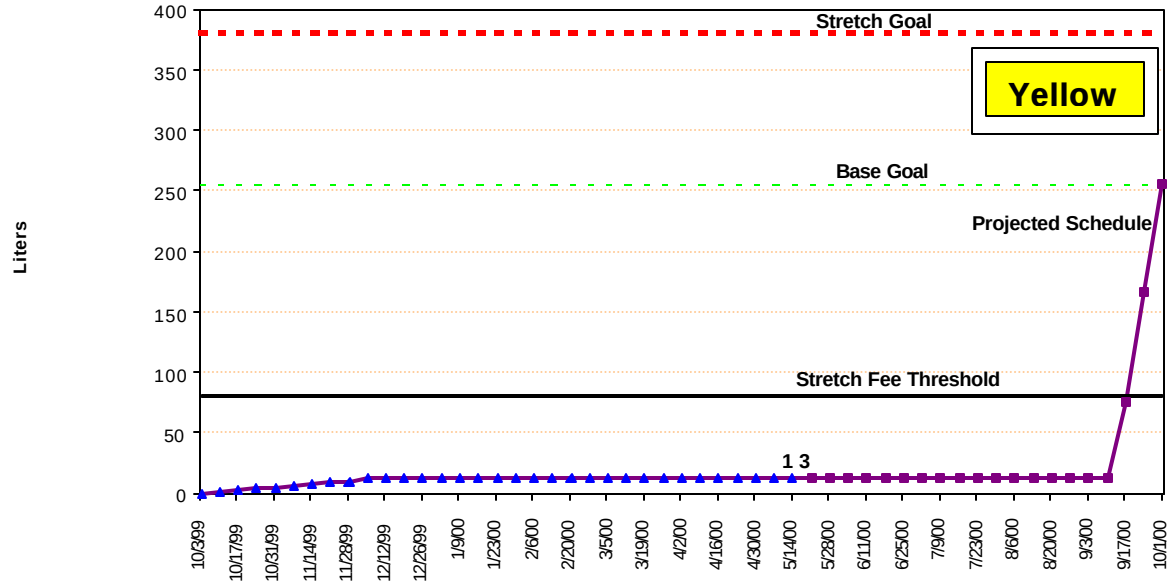
Green

Oxides/Metals/Polycubes Stabilization



	10/3	10/17	10/31	11/14	11/28	12/12	12/26	1/9	1/23	2/6	2/20	3/5	3/19	4/2	4/9	4/23	5/7	5/21	6/4	6/18	7/2	7/16	7/30	8/13	8/27	9/10	9/24
Oxides Stretch Goal	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Oxides Base Goal	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0
Oxides Actual	0	10	27	67	95	107	157	164	164	174	174	189	201	209	221	228	255										
Oxides Projected Schedule																		275	315	355	395	435	475	515	540	550	560
Stretch Fee Threshold	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Solution Stabilization

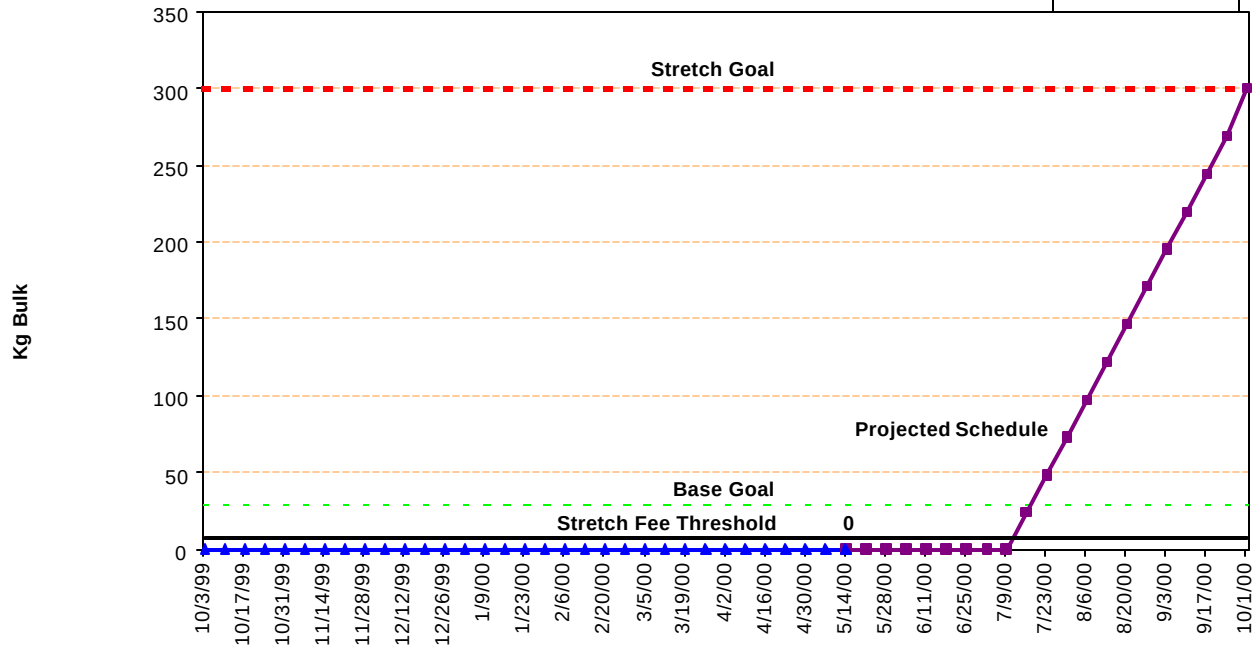


	10/3	10/17	11/7	11/21	12/5	12/26	1/9	1/23	2/6	2/27	3/12	3/26	4/16	4/30	5/14	6/4	6/18	7/2	7/16	8/6	8/20	9/3	9/24
Solutions Stretch Goal	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380
Solutions Base Goal	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0
Solutions Actual	0	2	6	9	12	13	13	13	13	13	13	13	13	13	13								
Solutions Projected Schedule															13	13	13	13	13	13	13	13	165.5
Stretch Fee Threshold	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80

Aggressively pursuing construction completion in support of stabilization activities.

Residues Stabilization

Yellow



	10/3	10/17	11/7	11/21	12/5	12/26	1/9	1/23	2/6	2/27	3/12	3/26	4/16	4/30	5/14	6/4	6/18	7/2	7/16	8/6	8/20	9/3	9/24
Residues Stretch Goal	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
Residues Base Goal	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Residues Projected Schedule															0	0	0	0	24	97.5	146.5	195.5	269
Residues Actual	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
Stretch Fee Threshold	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

Update baseline schedule for new cementation start-up date and adjust ash schedule for preparatory work.

KEY INTEGRATION ACTIVITIES

- Working on interface agreement between PFP and Waste Management to define requirements and responsibilities to support CWC and WIPP acceptance of packaged residues.
- Continue work with Rocky Flats to procure containers (Pipe-n-Go) to support PFP Residue Stabilization without the need for another procurement action.Work continues with Rocky Flats to reach a joint resolution to PFP stabilization heating process.
- Joint PNNL/PPSL $Mg(OH)_2$ Continues:
  - Status meeting with PNNL, PFP & DOE RL
  - PPSL preparing to conduct scale testing with test set up developed by PNNL.
  - Downloaded solutions (1 PR container) in room 227 to support Phase 2 testing by PPSL